

1. (Twice Amended) A method of analyzing multi-threaded programs, comprising:  
determining that unsynchronized accesses to a resource of interest can be performed by a plurality of threads;  
receiving a request from a first thread to access the resource, wherein the resource is available;  
suspending the first thread for accessing the resource that is available; and  
while the first thread is suspended, receiving a request from a second thread to access the resource.

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2. The method of claim 1, wherein the requests of the first and second threads is to write data to the resource.

3. The method of claim 1, further comprising awakening the first thread.

4. The method of claim 1, further comprising logging for a user that the first and second thread performed unsynchronized accesses to the resource.

5. The method of claim 1, wherein the first thread is suspended for a predetermined time, meaning that the first thread awakens after the predetermined time expires.

6. (Previously Amended) The method of claim 5, wherein the first thread is also suspended on an event, meaning that the event awakens the first thread.

7. The method of claim 6, wherein the second thread sends the event that awakens the first thread.

8. The method of claim 1, wherein the resource is a memory location, region of memory, hardware component, or peripheral device.

9. (Twice Amended) A computer program product for analyzing multi-threaded programs, comprising:  
computer code that determines that unsynchronized accesses to a resource of interest can be performed by a plurality of threads;  
computer code that receives a request from a first thread to access the resource, wherein the resource is available;  
computer code that suspends the first thread for accessing the resource that is available;

computer code that while the first thread is suspended, receives a request from a second thread to access the resource; and  
a computer readable medium that stores the computer codes.

10. The computer program product of claim 9, wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave.

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11. (Twice Amended) A method of analyzing multi-threaded programs, comprising:  
determining that unsynchronized accesses to a memory location can be performed by a plurality of threads;

receiving a request from a first thread to write data to the memory location, wherein the memory location is available for writing;

suspending the first thread for writing data to the memory location that is available for writing; and

while the first thread is suspended, receiving a request from a second thread to write data to the memory location.

12. The method of claim 11, further comprising awakening the first thread.

13. The method of claim 11, further comprising logging for a user that the first and second thread performed unsynchronized writes to the memory location.

14. The method of claim 11, wherein the first thread is suspended for a predetermined time, meaning that the first thread awakens after the predetermined time expires.

15. (Previously Amended) The method of claim 14, wherein the first thread is also suspended on an event, meaning that the event awakens the first thread.

16. The method of claim 15, wherein the second thread sends the event that awakens the first thread.

17. (Twice Amended) A computer program product for analyzing multi-threaded programs, comprising:

computer code that determines that unsynchronized accesses to a memory location can be performed by a plurality of threads;

computer code that receives a request from a first thread to write data to the memory location, wherein the memory location is available for writing;

computer code that suspends the first thread for writing data to the memory location that is available for writing;

computer code that while the first thread is suspended, receives a request from a second thread to write data to the memory location; and

a computer readable medium that stores the computer codes.

18. The computer program product of claim 17, wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave.

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19. (Twice Amended) A method of analyzing multi-threaded programs, comprising:  
determining that unsynchronized accesses to a memory location can be performed by a plurality of threads;

receiving a request from a first thread to write data to the memory location, wherein the memory location is available for writing;

suspending the first thread for writing data to the memory location that is available for writing;

while the first thread is suspended, receiving a request from a second thread to write data to the memory location;

awakening the first thread; and

logging for a user that the first and second thread performed unsynchronized writes to the memory location.

20. The method of claim 19, wherein the first thread is suspended for a predetermined time, meaning that the first thread awakens after the predetermined time expires.

21. (Previously Amended) The method of claim 20, wherein the first thread is also suspended on an event, meaning that the event awakens the first thread.

22. The method of claim 21, wherein the second thread sends the event that awakens the first thread.

23. (Twice Amended) A computer program product for analyzing multi-threaded programs, comprising:

computer code that determines that unsynchronized accesses to a memory location can be performed by a plurality of threads;

computer code that receives a request from a first thread to write data to the memory location, wherein the memory location is available for writing;

computer code that suspends the first thread for writing data to the memory location that is available for writing;

computer code that while the first thread is suspended, receives a request from a second thread to write data to the memory location;

computer code that awakens the first thread;

computer code that logs for a user that the first and second thread performed unsynchronized writes to the memory location; and

a computer readable medium that stores the computer codes.

24. The computer program product of claim 23, wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave.

25. (Twice Amended) A method of analyzing multi-threaded programs, comprising: modifying an existing multi-threaded program include computer code that determines that unsynchronized accesses to a memory location can be performed by a plurality of threads;

modifying the existing multi-threaded program to include computer code that suspends a first thread that requests to write data to a memory location that is available, wherein a second thread writes data to the memory location; and

modifying the existing multi-threaded program to include computer code that logs for a user that the first and second thread performed unsynchronized writes to the memory location when a second thread writes data to the memory location.

26. The method of claim 25, wherein the first thread is suspended for a predetermined time, meaning that the first thread awakens after the predetermined time expires.

27. (Previously Amended) The method of claim 26, wherein the first thread is also suspended on an event, meaning that the event awakens the first thread.

28. The method of claim 27, wherein the second thread sends the event that awakens the first thread.

29. (Twice Amended) A computer program product for analyzing multi-threaded programs, comprising:

computer code that modifies an existing multi-threaded program include computer code that determines that unsynchronized accesses to a memory location can be performed by a plurality of threads;

computer code that modifies the existing multi-threaded program to include computer code that suspends a first thread that requests to write data to a memory location that is available, wherein a second thread writes data to the memory location;

computer code that modifies the existing multi-threaded program to include computer code that logs for a user that the first and second thread performed unsynchronized writes to the memory location when a second thread writes data to the memory location; and

a computer readable medium that stores the computer codes.

30. The computer program product of claim 29, wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave.